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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,577	12/14/2005	Pascal Denolly	Q88613	4484

23373 7590 12/27/2007

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EXAMINER	
VU, QUYNH-NHU HOANG	

ART UNIT	PAPER NUMBER
3763	

MAIL DATE	DELIVERY MODE
12/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,577	DENOLLY, PASCAL	
	Examiner	Art Unit	
	Quynh-Nhu H. Vu	3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Amendment filed on 11/21/07 has been entered.

Claims 2-12 are present for examination.

Claim 1 is cancelled.

Applicant's arguments filed on 11/21/07 have been fully considered but are not persuasive. Therefore, claims 2-12 are rejected in the same ground rejections as set forth in the office action mailed 8/17/07.

The specification, claim objections have been withdrawn in view of the amendments filed on 11/21/07.

The claim rejections under 35 USC §112, 2nd paragraph have been withdrawn in view of amendments filed on 11/21/07

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duchon et al. (US 2002/0151854) in view of Oscarsson et al. (4,645,496).

Duchon discloses a distribution device for a system 10 for delivery of medical fluids to a patient, comprising:

a syringe body 18, a feed tube (the tube connected to reservoir bottle 22), opening into a syringe body 18; a distrubutor 26 comprising a distributor body 26; a chamber having a wall; a slide 362 or 376 (Figs. 7A-7D) which can move in relation to the distributor body; a resilient member 372 placed between

the slide 362 and a fixed part (360 or 374, part 26 is considered a fixed part also) of the distributor body; an injection tube 80 for injection of the active medical fluid, connected to a distal extremity of the syringe body and opening into the chamber of the distributor; a pressurised tube 28 designed to be connected to the patient and opening into the chamber of the distributor; a pressure measurement tube 90, 92 designed to be connected to a line for measuring the pressure of teh system and opening (via connected to the chamber) into the chamber of the distributor; a flush tube 42 desithed to be connected to a reservoir 50 for flush medical fluid. It is noted that the flush port 82 is formed in the distributor body (manifold 26), and since Duchon discloses that the manifold can take other configurations, such as if the manifold is larger configuration, the flush tube 42 is formed within the manifold. Beside that, it is common sense and well-known in the art that the flush tube 42 can be formed/reranging the flush tube in the distribution body (manifold) only rountine skill in the art. And the flush tube 42 (Figs. 1-2) can work silimar as the device of applicant, and do the same function: such as flush the medical. The flush tube 42 having a valve 46 (or valve pinching/occcluding tubing 42, see [0086], and Figs. 2A-G) equipped with a plug (it is noted that any vavle inherently having a plug to control the flow of fluid); wherein the distributor provides an automatic connection via the chamber between the pressurised tube 28 and either the injection tube 80 or the pressure measurement tube 90 through the action of the pressure of the medical fluid and the resilient member 372; wherein the distributor 26 connects the flush tube 42 and the pressurised tube 28; the pressure measurement tube 90, 92, the flush medical fluid circulating via the compartment between the flush tube 42 and the pressure measurement tube when the are in connection.

Duchon discloses a valve, but Duchon silient that the structure of the valve as described in claims 3-7.

Oscarsson discloses a valve device (Figs. 1-7) has a cylindrical drum element rotattably mounted with a chamber of a body member and ablve to adjest the flow rate by manually (see abstract); the two-way valve further comprises that a plug and a means for resilient returning the valve into its closed position; a flexible blade 150 mechanically connected to the valve (Fgis. 3, 5-7)

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to provided the device of Duchon with a vave, as taught by Oscarson, to manually control the fluid into the system.

Regarding claims 9-10, Regarding claims 9-10, Duchon further discloses the feed tube (the tube connected to reservoir bottle 22) feeding the first active medical fluid is bounded by the distributor; the feed tube (the part 78 of the feed tube) and the injection tube 80 are in parallel directions (see Fig. 7).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duchon et al. (US 2002/0151854) in view of Houde et al. (US 2004/0082904).

Duchon discloses that the device as described in claim 12 above, a pressurized line (pressurized tube 28) comprising at one extremity a catheter 30 designed to be inserted into the patient's body; a pressure measurement line 90 or 92 incorporating a conduit fitted with a pressure sensor (pressure transducer 38 must have pressure sensor) and designed to be connected to the pressure measurement tube 90; and a flush line 22 comprising a flexible conduit fitted with a drip chamber (a bottom part with funnel-shaped of saline bag 50) and designed to be connected at the reservoir 50 for a flush solution. Duchon is silent about the feed line (line 78) comprising a flexible tube.

Houde discloses that a distribution system comprising a feed line (28a) for contrast product (12) comprising a flexible conduit (13) fitted with the contrast source (12).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Duchon with a feed line connected with flexible conduit, as taught by Houde, to provide communication between the contrast fluid supply to the syringe.

Response to Arguments

Applicant's arguments filed 11/21/07 have been fully considered but they are not persuasive.

1) Applicant argues that a diagonal passage (a slide) 376 does not constitute a compartment formed by the slide and walls of the chamber of the distributor, as defined in claim 12.

In response, Figs. 1, 7A-7D are clearly show that the diagonal passage (a slide) 376 can be formed by the slide and walls of the chamber of the distributor. For example, Fig. 7D shows that the diagonal passage 376 slide in different position respect to Figs. 7A-C.

2) Applicant argues that the flush line 42 circulating directly in line 90+92, **without circulating in a part of the chamber of distributor 26.**

In response, Figs. 2A-G clearly show the flush line is circulating in a part of the chamber of distributor 26. Furthermore, the flush line is inherently/well-known to circulating the fluid in the distribution for flushing mediacal fluid.

3) Applicant argues that the Duchon device is not provided with "a valve equipped with a plug which can be moved manually"

In response, Duchon provided a valve 46, or valve pinching (see [0086] and Figs. 2A-G). Furthermore, any valve must have a plug to control the fluid flow. Beside that, valve of Oscarsson discloses a valve with a plug and can be moved manually.

4) Applicant argues that Oscarsson device does not provide two separate tubes opening in the chamber of distributor, respectively for the flusing and the pressure measuring.

In response, Duchon discloses this limitation above. Please see rejection above. Furthemore, Oscarsson discloses a valve/flow control device capable of providing contious flushing of the catheter with a flushing solution selectively at either a slow or fast rate.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh-Nhu H. Vu whose telephone number is 571-272-3228. The examiner can normally be reached on 6:00 am to 3:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quynh-Nhu H. Vu
Examiner
Art Unit 3763